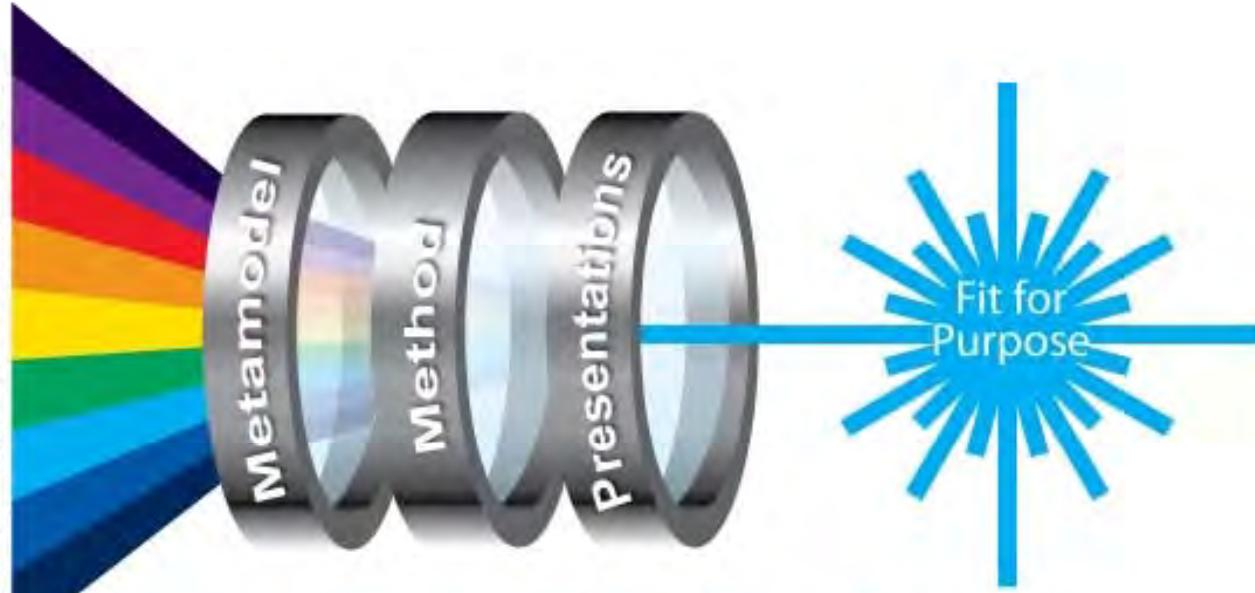




AUTHORITATIVE DATA



# DoDAF V2.0

## DoDAF V2.0 Overview

28 April 2010

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# Introduction

- DoDAF is prescribed for the **use and development** of **Architectural Descriptions** in the Department
- DoDAF V2.0 provides an overarching set of architecture **concepts, guidance, best practices, and methods** to enable and facilitate architecture development
- Explicit Roles & Responsibilities
  - **Managers** guidance for use and management of architecture
  - **Architects** guidance for development of architecture, meta-model and data exchange requirements
  - **Developers** guidance defines the DM2 Physical Exchange Specification



# Goal: Support Core Processes

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1. Capabilities Integration and Development (JCIDS)
2. Planning, Programming, Budgeting, and Execution (PPBE)
3. Acquisition System (DAS)
4. Systems Engineering (SE)
5. Operations Planning
6. Capabilities Portfolio Management (CPM)



# Promulgation Memo

- Version 2.0 is the prescribed framework for all Department architectures and represents a substantial shift in approach.
  - *Don't redo current architecture*
- Architectures shall comply with DoDAF V2.0 in their next major release.
  - *Update only in the next release*
  - *Does not prevent early adoption of DoDAF V2.0*



# DoDAF V2.0 Conformance

- The data in an architectural description is defined according to the DoDAF meta-model (DM2) **concepts**, **associations**, and **attributes**.
  - The information captured in an architecture tool is consistent with the DM2 concepts, associations, and attributes.
  - Architectural data should be stored in a recognized commercial architecture tool that conforms to industry standards.
  - Tools, preferably **data-driven**, can be used for the **presentation** of architectural data, but must be based on DATA.
- The architecture data is capable of transfer in accordance with the **Physical Exchange Specification** (PES).
  - Architectures that will exchange information need to comply with DM2 PES (for the appropriate architectural data).



# Key Concepts





# DoDAF V2.0 Key Concepts

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- Data-centric v. Product Centric
- DoDAF V2.0 Meta-Model (DM2)
- DoDAF V2.0 Method
- DoDAF Described Models vs. Presentation Views
- “Fit-for-Purpose”



# Authoritative Data



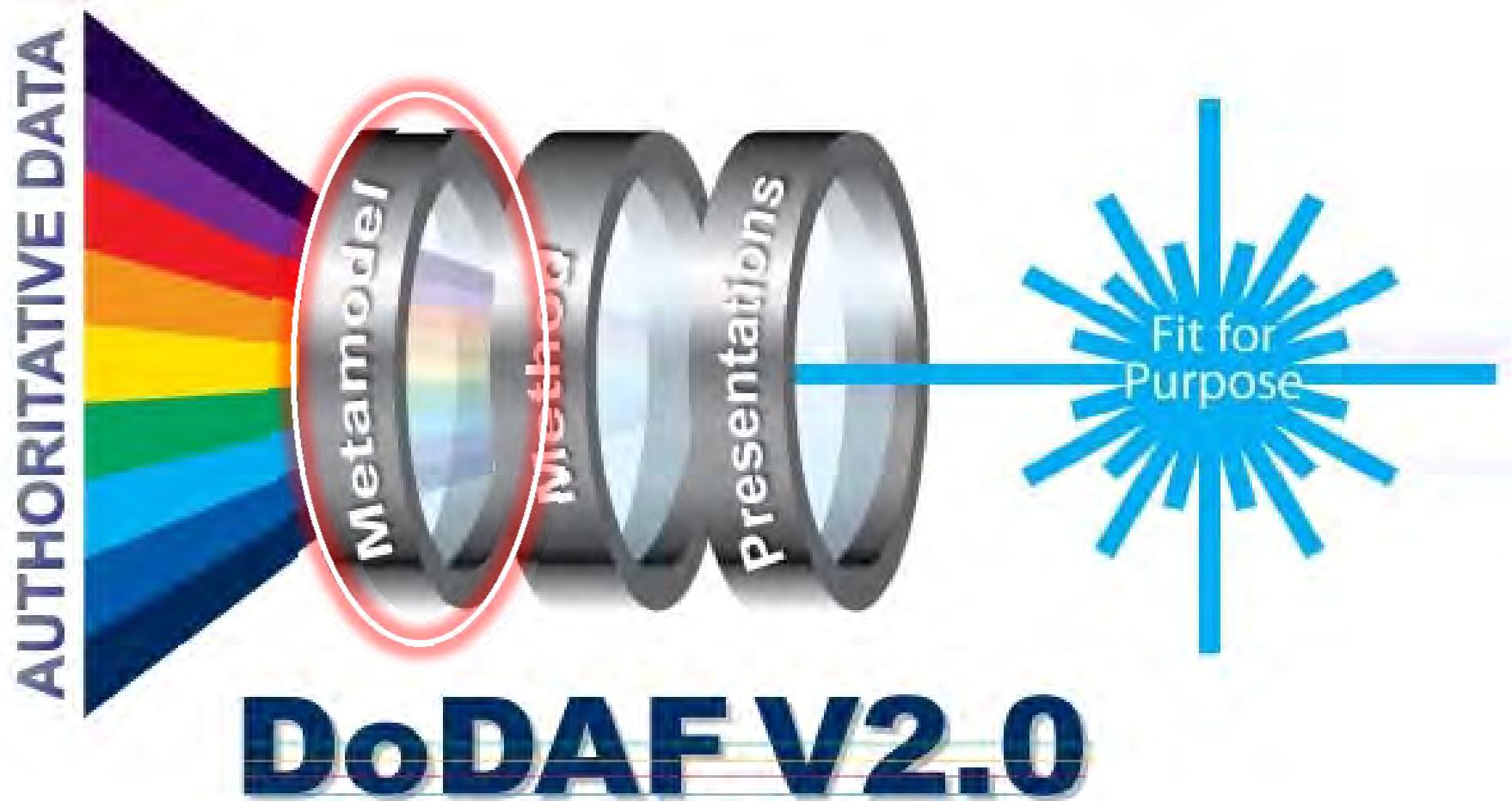


# Data-Centric Paradigm

- Prior versions of DoDAF emphasized '**products**' (i.e., graphical representations or documents).
- DoDAF V2.0 emphasizes the **capture and analysis of data** and its relationships, rather than the creation of products.
  - **Emphasizes** on utilizing architectural data to support **analysis** and **decision-making**.
  - Greatly expands the types of graphical representations that can be used to **support decision-making activities**.
  - Supports **innovative and flexible presentation** of the architectural data in a meaningful, useful, and understandable manner.



# Metamodel





# DM2 Introduction

- Constrained vocabulary for DoDAF
  - For the description and discourse of models
- Federated EA data exchange specification
  - For interoperability of EA data between tools, DBs
- Supports the Net Centric Data Strategy
  - Discovery and understandability of EA data
- Precision semantics for EA analysis
  - Provides mathematical rigor to the data

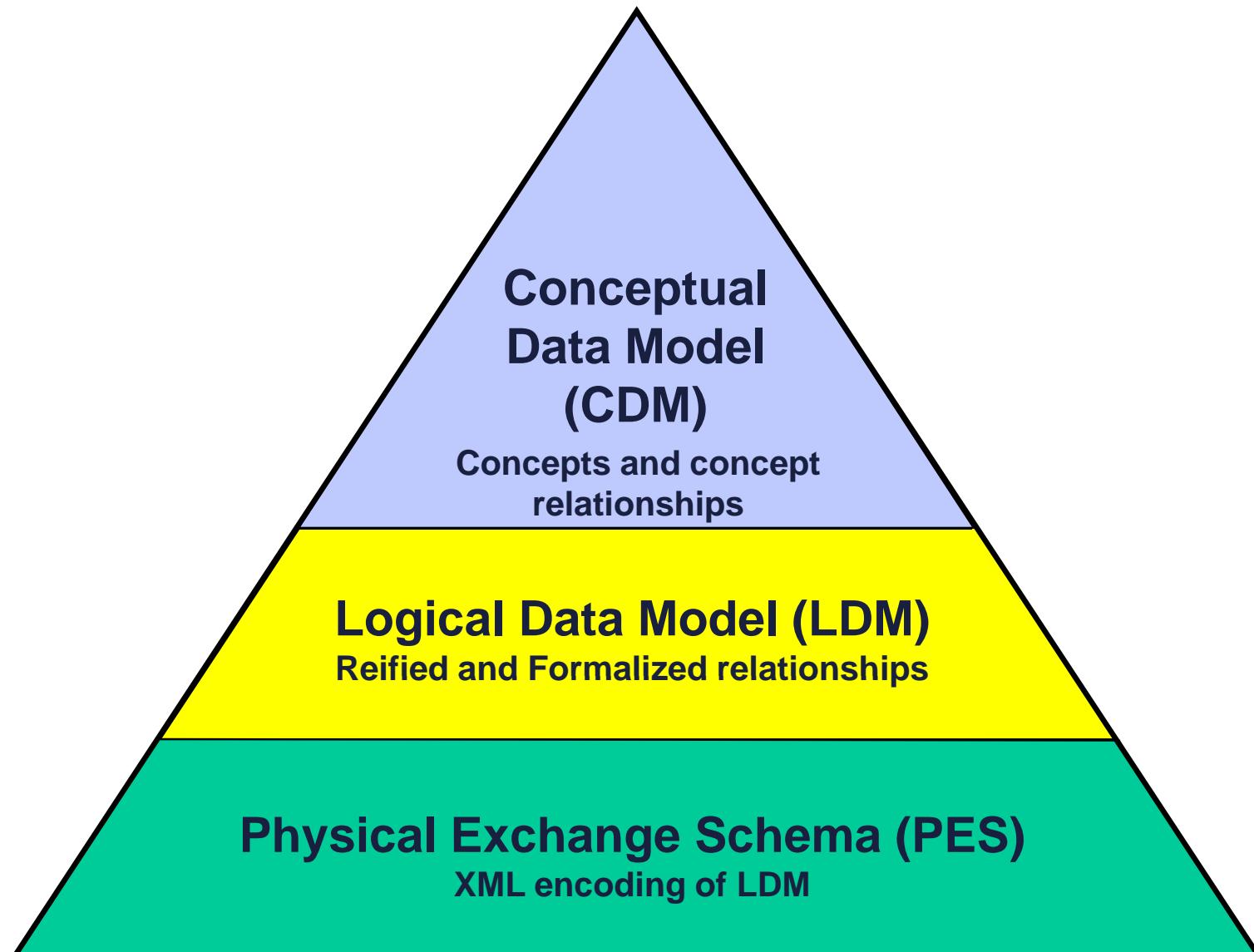


# What is the DM2

- The DM2 is made up of three parts:
  - **Conceptual** Data Model
    - Key Concepts and Relationships in Non-Technical Terms
  - **Logical** Data Model
    - UML Class models that adds technical context to the CDM
  - **Physical** Exchange Specification (PES)
    - Implementation model and XSD Schemas
- Built upon the **IDEAS** Foundation
  - International Defense Enterprise Architecture Specification
  - Foundational objects (“Thing”, “Individual”, “Type”, etc.)
  - Relationship types (aka “Tuple” types)
    - “Whole/Part”, “Before-After”, Temporal, etc.”

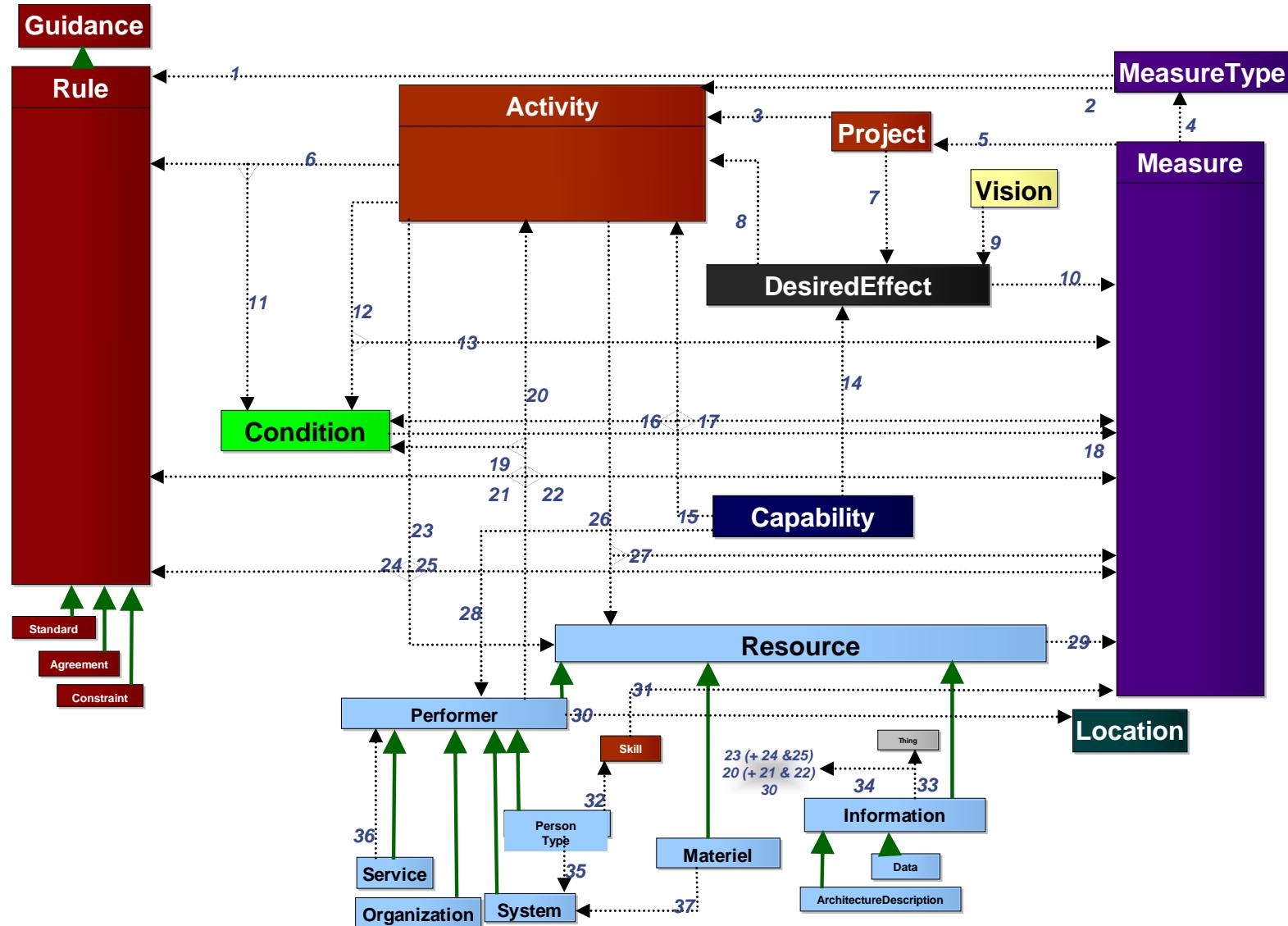


# Three Levels of the DM2





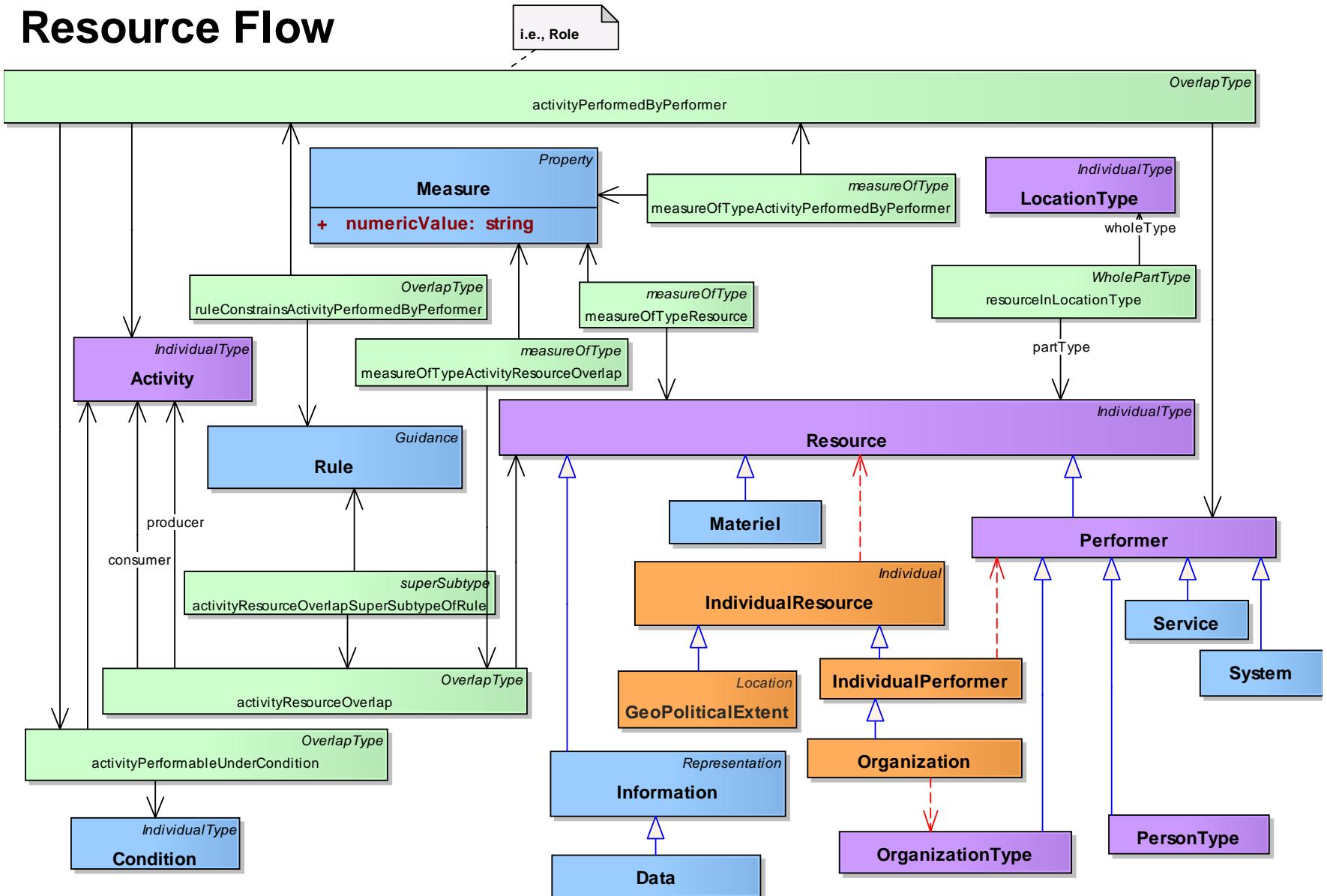
# Conceptual Data Model





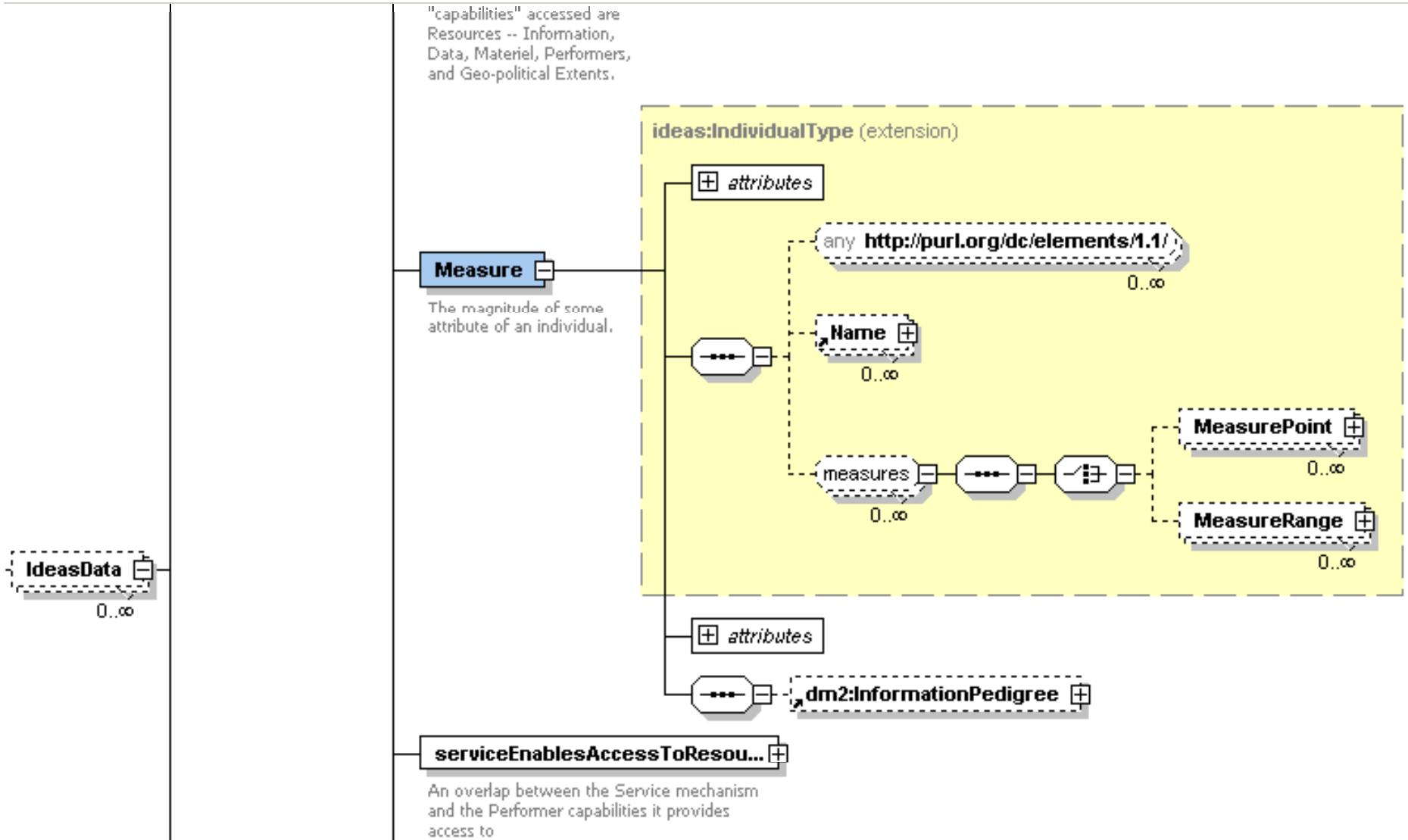
# Logical Data Model (sample)

## Resource Flow



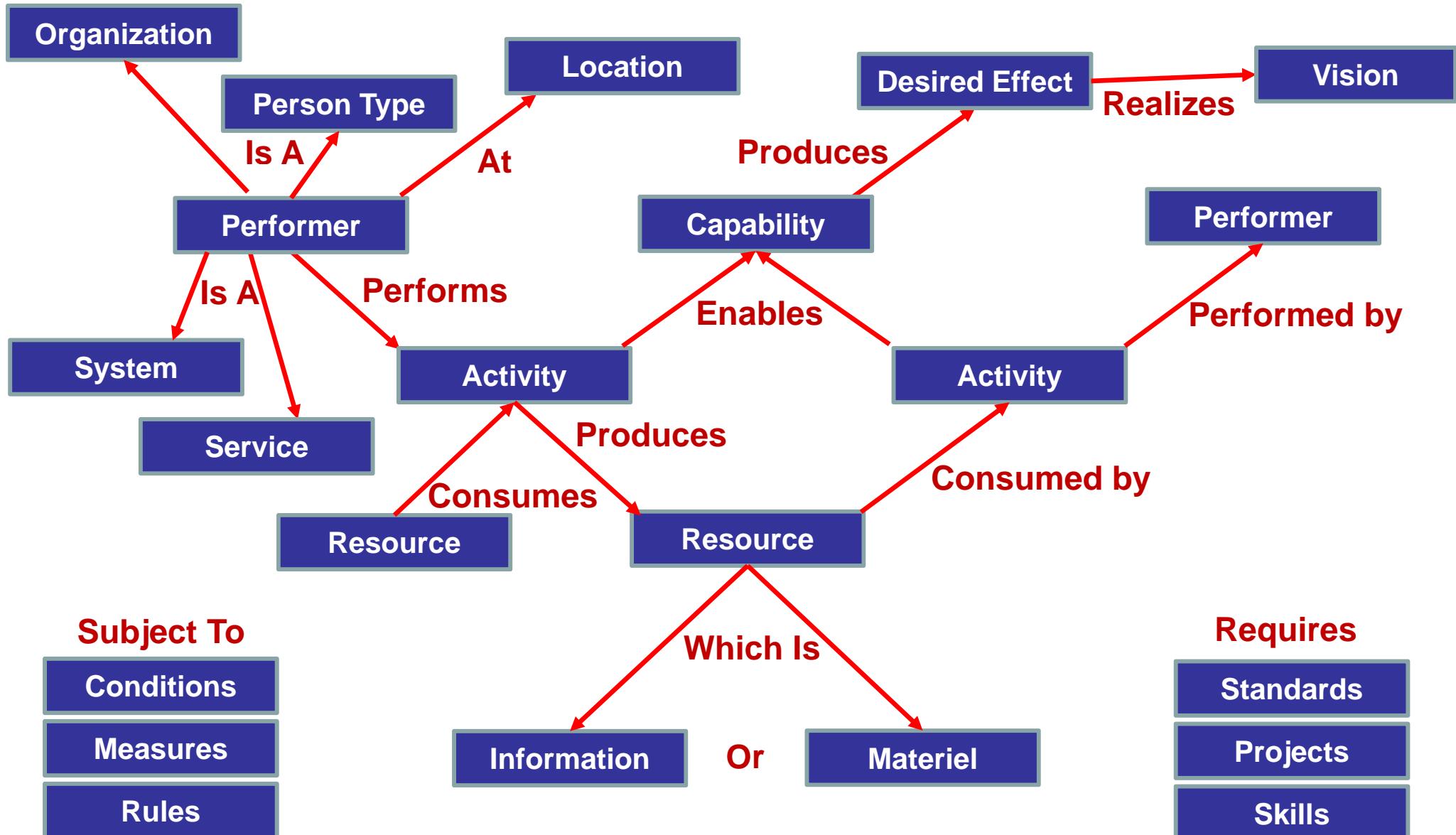


# Physical Exchange Specification





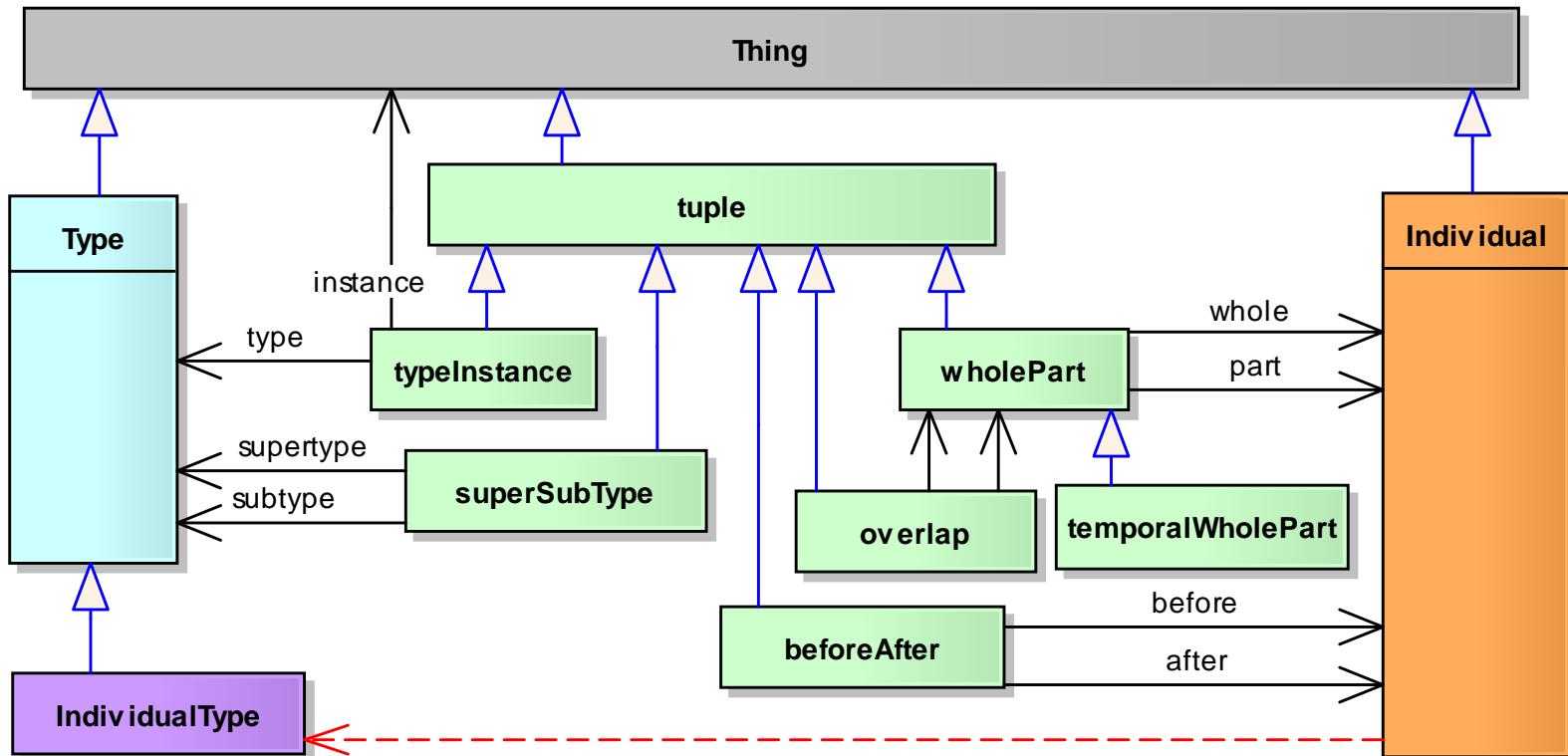
# DM2 in Practice



# IDEAS Foundation



- Developed by an international group of computer scientists, engineers, mathematicians, and philosophers under defense sponsorship.
- See <http://www.ideasgroup.org> or [http://en.wikipedia.org/wiki/IDEAS\\_Group](http://en.wikipedia.org/wiki/IDEAS_Group)



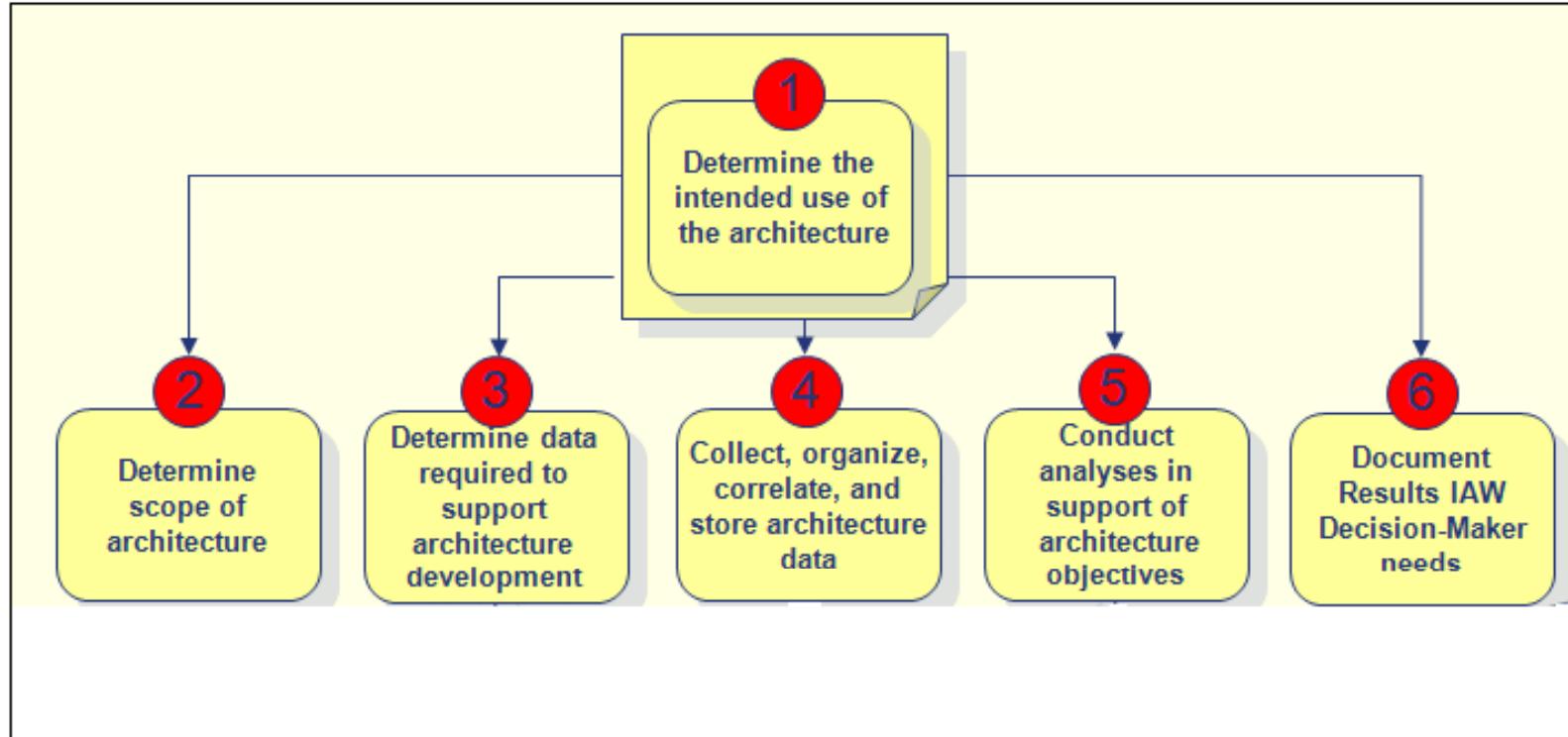


# Method



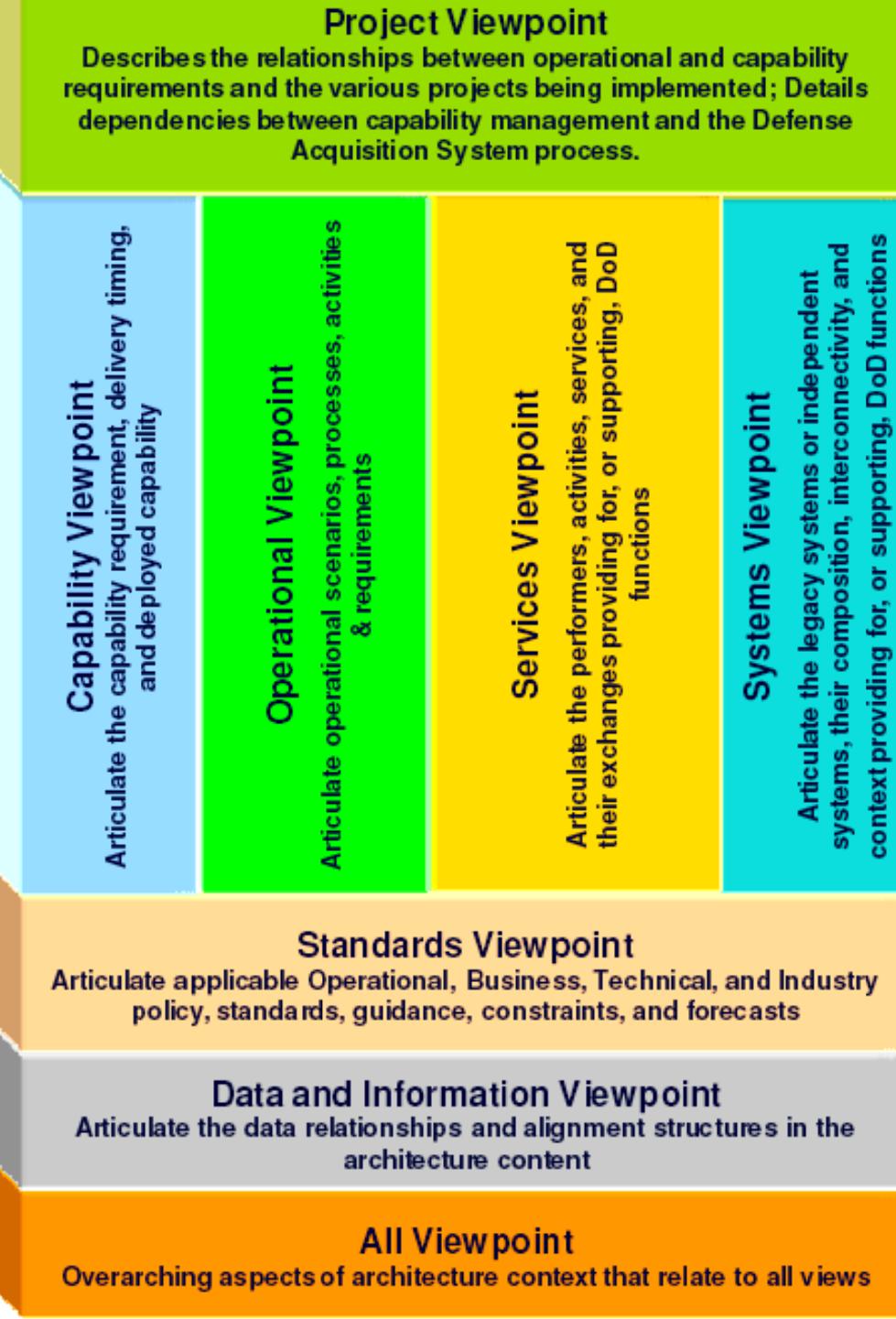


# Methodology: DoDAF V2.0 Six-Step Architecture Development Process



- Determine **Use, Scope, and Data Requirements** of Architecture
- **Architect** (build models), **analyze**, and **present** (report)

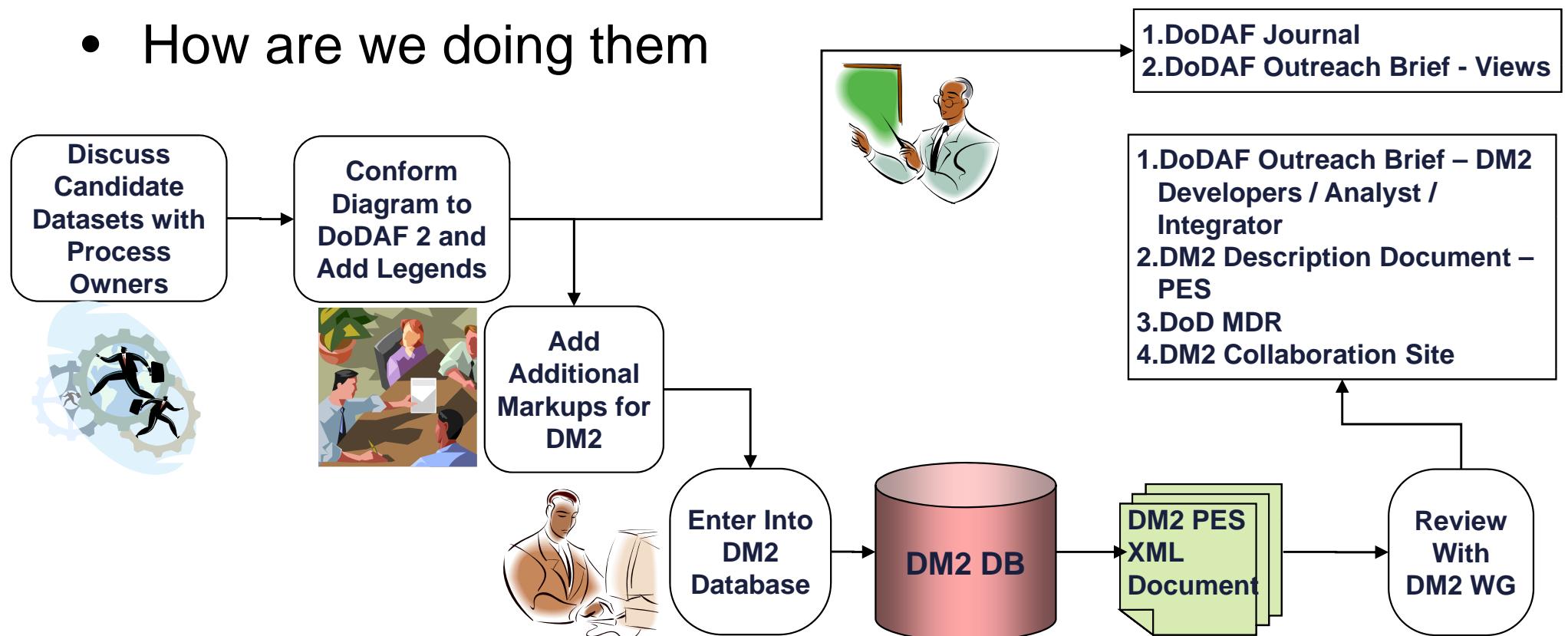
# DoDAF 2.0 Viewpoints





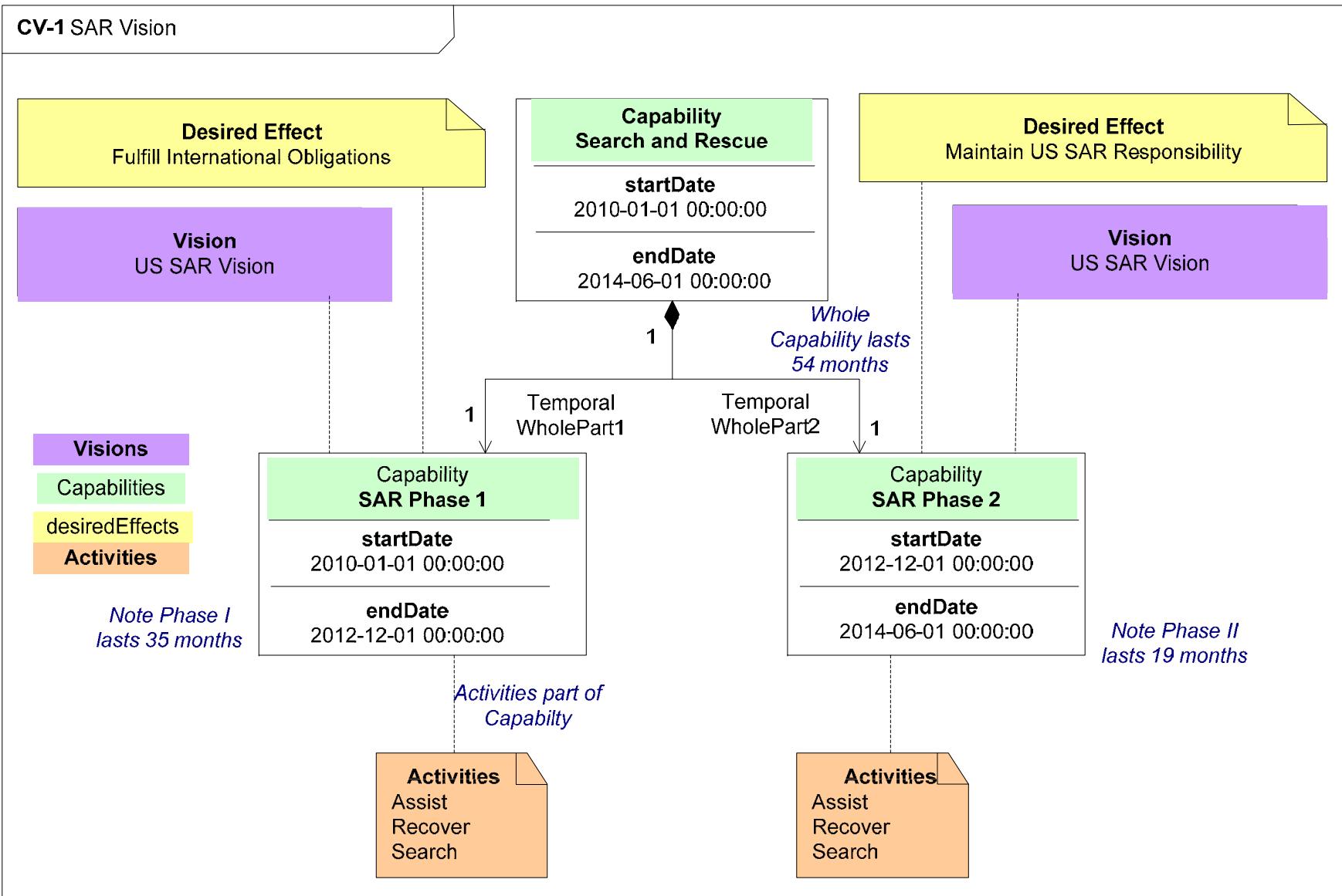
# DoDAF V2.0 Exemplars

- What are they
  - Collections of architectural views and their corresponding DM2 PES XML document examples
  - From coherent datasets, e.g., UPDM S&R, NCES ISP
- How are we doing them





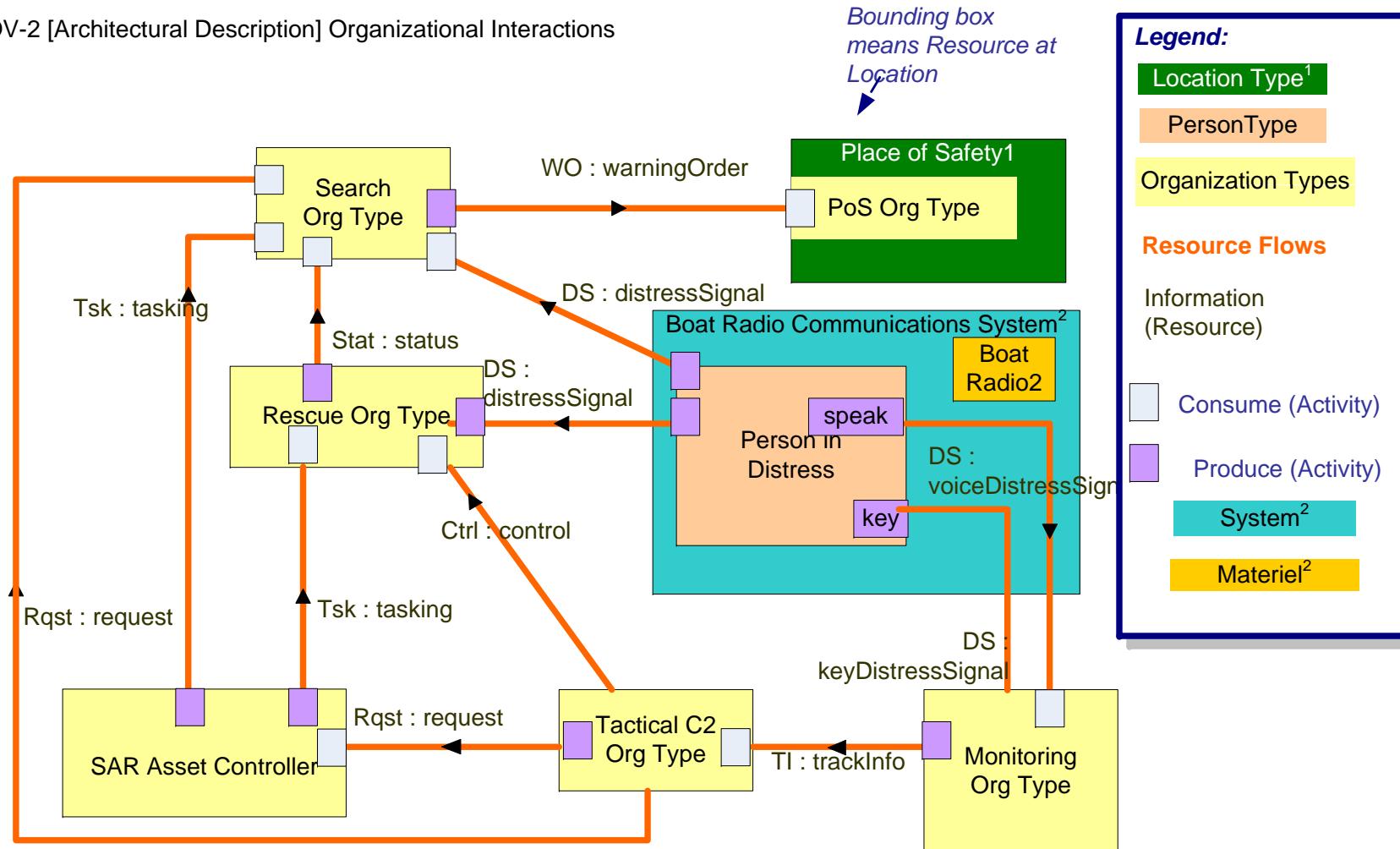
# Model Examples





# Model Examples

OV-2 [Architectural Description] Organizational Interactions

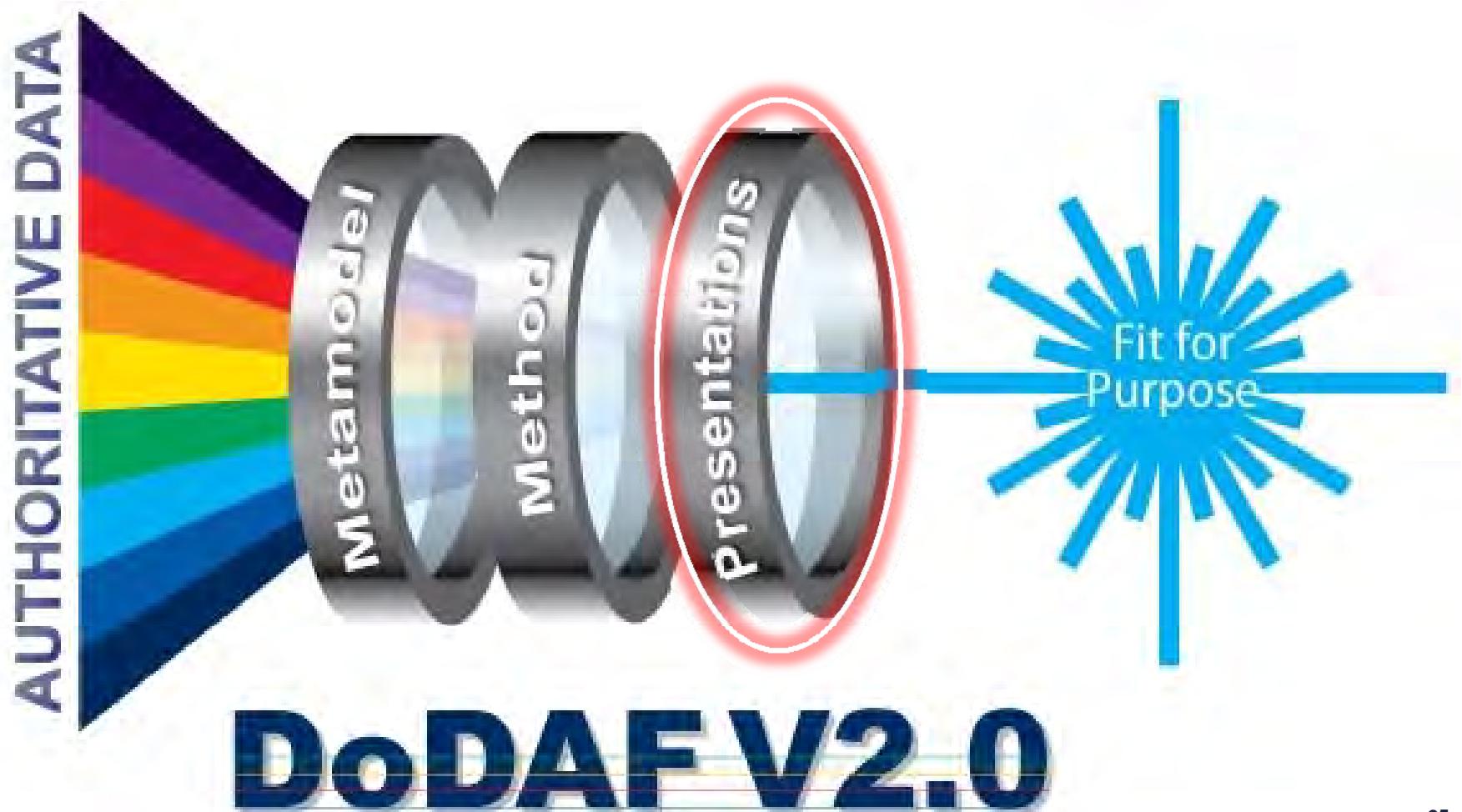


NOTE 1. Should generally not be shown in OV-2 unless an important constraint, i.e., not within the solution trade space.

NOTE 2: Should never be in OV-2 but included here for illustrative purposes to show SV-1 “bridge”. Such a dataset could be defined as a “fit for purpose” dataset within a sub-COI.



# Presentations



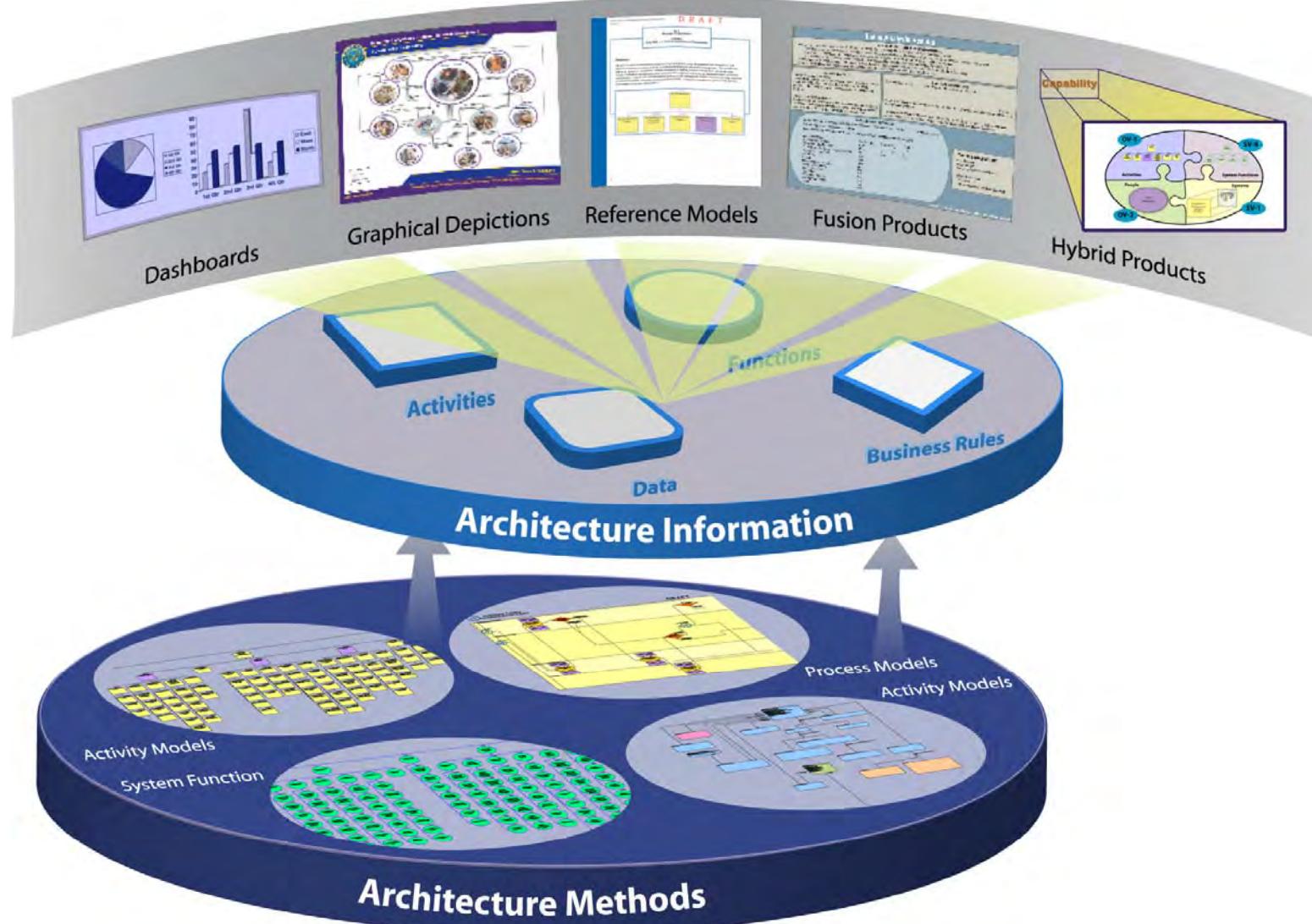


# Presentation Views

- DoDAF V2.0 enables architects to provide visualizations of the collected architecture information through a combination of DoDAF-described Models and Fit-for-Purpose Views.
- ***DoDAF V2.0-described Models*** are **templates** for creating architecture views (i.e., OV-2, SysV-4) of the architecture data.
- ***Presentation Views*** allow the architect to **present** the **data** in **views commonly used by information consumers**.

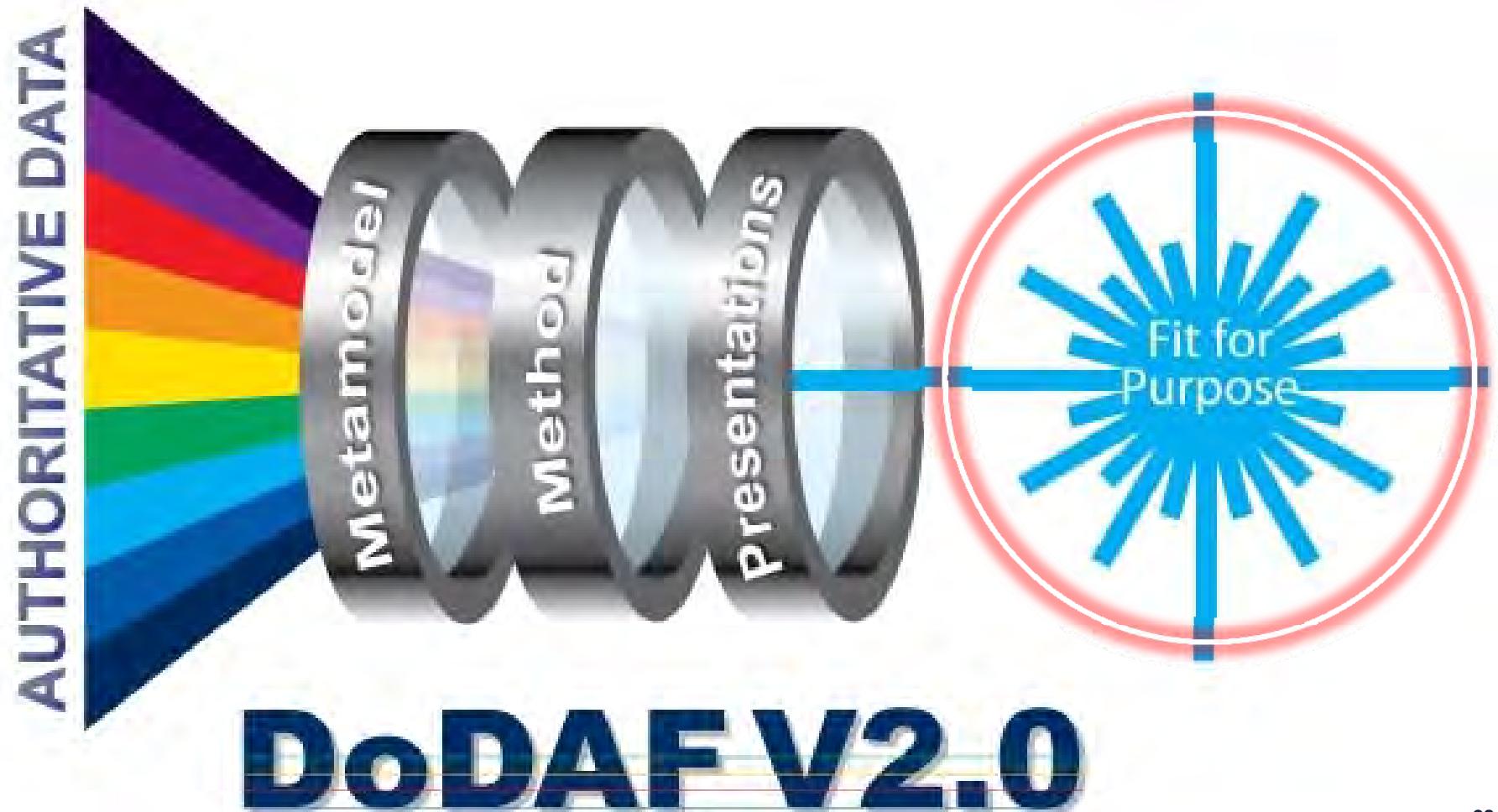


# Presentation Views





# “Fit-for-Purpose”





# “Fit-for-Purpose”

- Is an architectural view that is appropriately **focused** on supporting the **stated goals** and **objectives**.
- Is **meaningful** and **useful** in the decision-making process.
- **Encourages** the architect to **focus** on collecting **data** and creating views that are **customized** to the **decision-maker's value chain**.
- Architectural data and views are **aligned** to the **information consumer's needs**.



# Web Enabled





# DoDAF V2.0 Moved to Web-Based Collaboration Environment

- DoDAF V2.0 will be promulgated via the DoD CIO/NII website and not published as document.
  - Promoting collaboration among the DoDAF community
  - Improved ability to locate information
  - Facilitate changes & updates to DoDAF guidance

The official and most current DoDAF V2.0 content is located on the government websites.



# DoDAF V2.0 Website Overview

- Public DoDAF Website
  - Open to public
  - Hosted on the DoD CIO/NII website
  - <http://cio-nii.defense.gov/sites/dodaf20/>
- Private DoDAF Website
  - Need Government Sponsor
  - Need Account
  - Change Request Submission
  - Hosted on DKO Homepage
  - <https://www.us.army.mil/suite/page/454707>



# Public Website

<http://cio-nii.defense.gov/sites/dodaf20>

DoDAF Architecture Framework Version 2.0 - Windows Internet Explorer

File Edit View Favorites Tools Help

DoDAF Architecture Framework Version 2.0

DoD Deputy Chief Information Officer

Department of Defense

Introduction  
What is New in DoDAF V2.0  
Navigate by Content  
    Vision for DoDAF V2.0  
    Architecture Resources  
    DoDAF V1.5 Support  
    Relationships to other Frameworks  
    Background  
    Architecture Development  
    Viewpoints  
    Models  
    DM2  
Navigate by Role  
    Manager Role  
    Architect Role  
    Developer Role

The DoDAF Architecture Framework Version 2.0

Welcome to the DoDAF web site! This website is the online documentation for the Department of Defense Architecture Framework.

The [Promulgation Memo](#) was signed on 28 May 2009 and is the prescribed framework for all Department architectures. The Department of Defense Architecture Framework (DoDAF), Version 2.0 serves as the overarching, comprehensive framework and conceptual model enabling the development of architectures to facilitate the ability of Department of Defense (DoD) managers at all levels to make key decisions more effectively through organized information sharing across the Department, Joint Capability Areas (JCAs), Mission, Component, and Program boundaries. The DoDAF serves as one of the principal pillars supporting the DoD Chief Information Officer (CIO) in his responsibilities for development and maintenance of architectures required under the Clinger-Cohen Act. It also reflects guidance from the Office of Management and Budget (OMB) Circular A-130, and other Departmental directives and instructions. This version of the Framework provides extensive guidance on the development of architectures supporting the adoption and execution of Net-centric services within the Department.

DoDAF Conformance criteria is listed [here](#).

Version 2.0

AUTHORITATIVE DATA  
Metamodel  
MathModel  
Presentation  
Fit for Purpose

DoDAF V2.0

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# Private DoDAF Website – DKO

<https://www.us.army.mil/suite/page/454707>

Army Knowledge Online - shelton.lee - Windows Internet Explorer

AKO https://www.us.army.mil/suite/portal/index.jsp Certificate Error Live Search

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The United States Department of Defense Assistant Secretary of Defense (Networks & Information Integration) DoD Chief Information Officer

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Search... AKO Content Search

DoDAF Homepage (Related Content ) Options

AKO Home > DoD Organizations > OSD > ASD (NII) / DoD CIO > DCIO/DoDAF Information Management, Integration and Technology > Directorate - Enterprise Architecture and Standards > DoDAF Homepage > DoDAF Homepage

Welcome to the DoDAF Homepage Options

The DoDAF Homepage contains:

- The formal *DoD Architecture Framework* documentation (V2.0, V1.5, and V1.0)
- The *DoDAF Journal*, an area for supporting files. It will include the files that support the DoDAF V2.0 Volumes, which will include examples, best practices, and community input.
- The DoDAF Configuration Management process
- Provides a channel to submit *Change Requests*. Change Requests and requests to add files to the DoDAF Journal will be processed in accordance with the Configuration Management process. Change Requests can be submitted for DoDAF and the DoDAF Journal below in the "DoDAF and DoDAF Journal Change Requests". Files can be uploaded by users in the "DoDAF Journal Knowledge Center Channel". This will initiate the CM process, however, the files will need to be approved before they will be visible.

DoDAF Announcements Options

15 Jan 2010 14:13 GMT

DoDAF V2.0 has been posted to Defenselink and is available to the public. » DoDAF V2.0

Current « Previous | Next » Archived

DoDAF Documentation Options

DoD Architecture Framework (DoDAF) Personal and Teams

Show 10 20 [50] 100

Details View

Version 1-0 Version 1-5 Version 2-0

Internet 100% 11:06 AM

Start Microsoft Office... Internet Explorer DoDAF 2 Plenary... Microsoft PowerPoint... PowerPoint Slide 5... 11:06 AM



# Change Request Information

- DKO DoDAF V2.0 Homepage,  
<https://www.us.army.mil/suite/page/454707>,
- Under the “DoDAF and DoDAF Journal Change Requests” channel
  - Select “Open a Topic” to initiate a Change Request
  - Initiated Change Requests will be reviewed and adjudicated monthly by DoDAF and DM2 Working Groups
  - Approved Change Requests will be updated in DoDAF 2.01



# DKO DoDAF V2.0 Homepage

<https://www.us.army.mil/suite/page/454707>

Army Knowledge Online - shelton.lee - Windows Internet Explorer

File Edit View Favorites Tools Help

Army Knowledge Online - shelton.lee

Details View

Additional Models 3 files   Architecture Evaluation 4 files   Architecture Process 3 files   DoDAF Configuration Management 0 files

DoDAF V2 Spiral 4 Comments 10 files   Other Information 16 files

Initiate Change Request Here

DoDAF and DoDAF Journal Change Requests

DoDAF Change Requests (Group: DoDAF)

1 - 5 of 12 [1] 2 3 > Show 10 20 50 100

Create a Topic Remove from Favorites

Topic	Last Message
Videos of DoDAF V2.0 Sessions	16 Feb 2010 14:52 GMT By: charles.thornburg
Change management Pages	16 Feb 2010 12:52 GMT By: charles.thornburg
Training Resources	16 Feb 2010 12:50 GMT By: charles.thornburg
UJTLS in AV-2	12 Feb 2010 15:07 GMT By: charles.thornburg
Activities and Functions	12 Feb 2010 15:04 GMT By: charles.thornburg

DoDAF Links

No links

Inside AKO | Help | Terms of Use © 2001-2010 United States Army

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start Microsoft Office O... DoDAF Plenary Microsoft Office P... Army Knowledge Onli...



# DoD Enterprise Architecture Conference



The background features a collage of images related to technology and defense. On the left, there's a grid of smaller images showing a landscape, a person in a helmet, and other abstract or military-related scenes. The right side features a large graphic of a globe with binary code (0s and 1s) overlaid. To the right of the globe is a diagram titled "Information Enterprise Architecture" with several boxes containing text: "Provide Data & Services Deployment", "Provide Secured Availability", "Provide Discovery Services", "Provide Assured Control of the GIG", and "Provide C&A Services". A "Core" label is also visible near the globe.

- San Antonio, TX
- May 10-14, 2010
- Register at:  
**[WWW.DODENTERPRISEARCHITECTURE.ORG](http://WWW.DODENTERPRISEARCHITECTURE.ORG)**
- Co-hosted by Architecture, Standards, and Interoperability Directorate, DoD Deputy CIO and Joint Staff



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# Questions